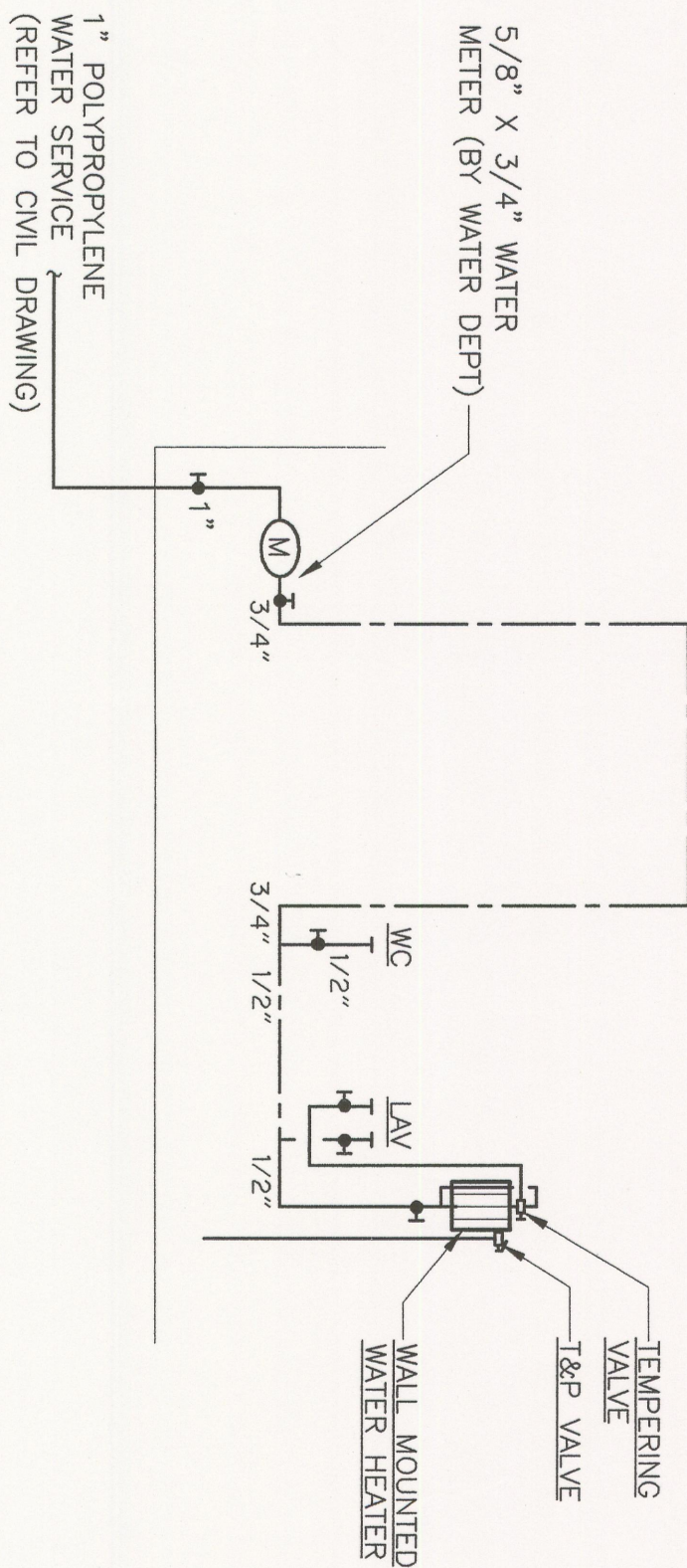
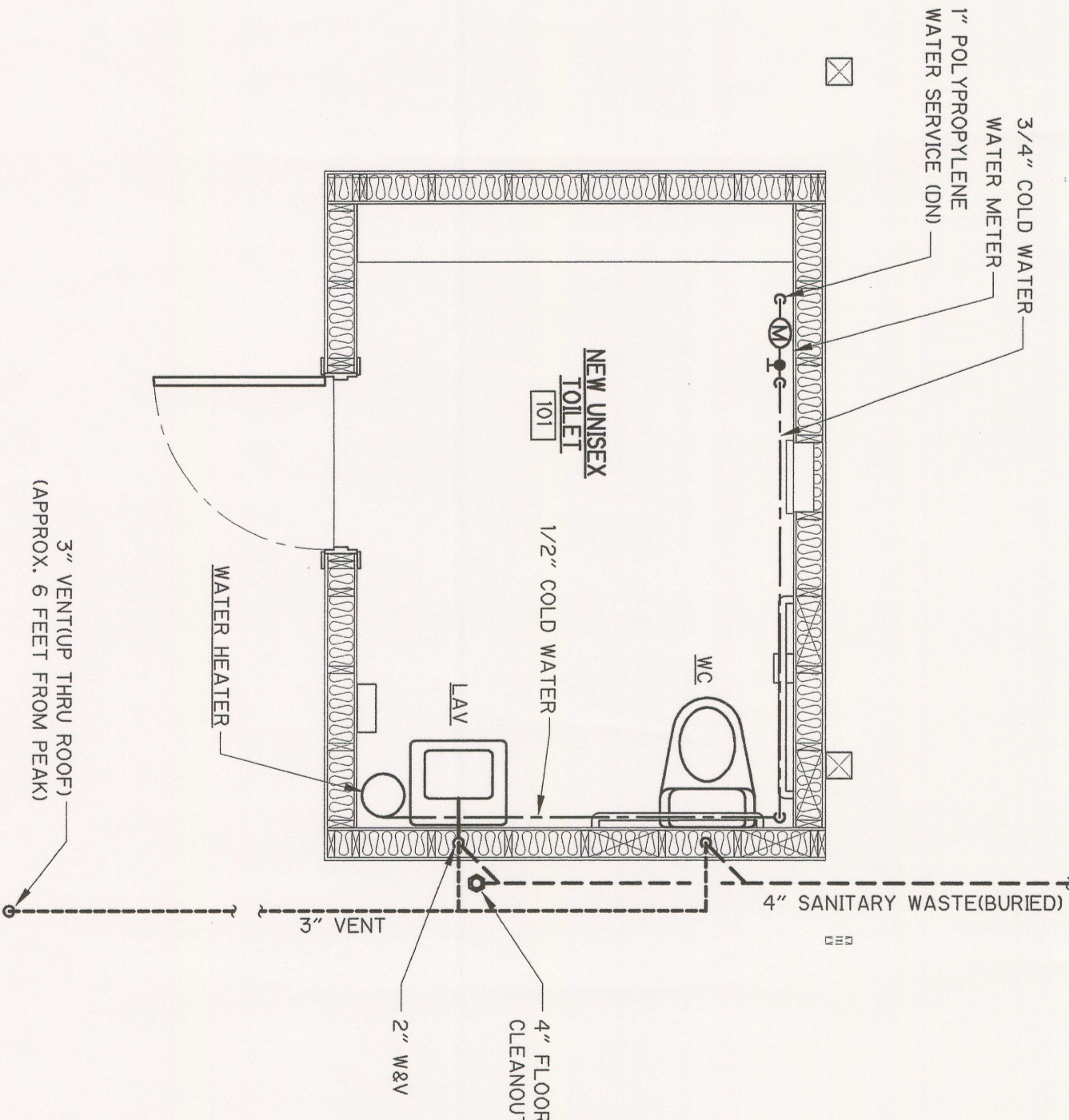


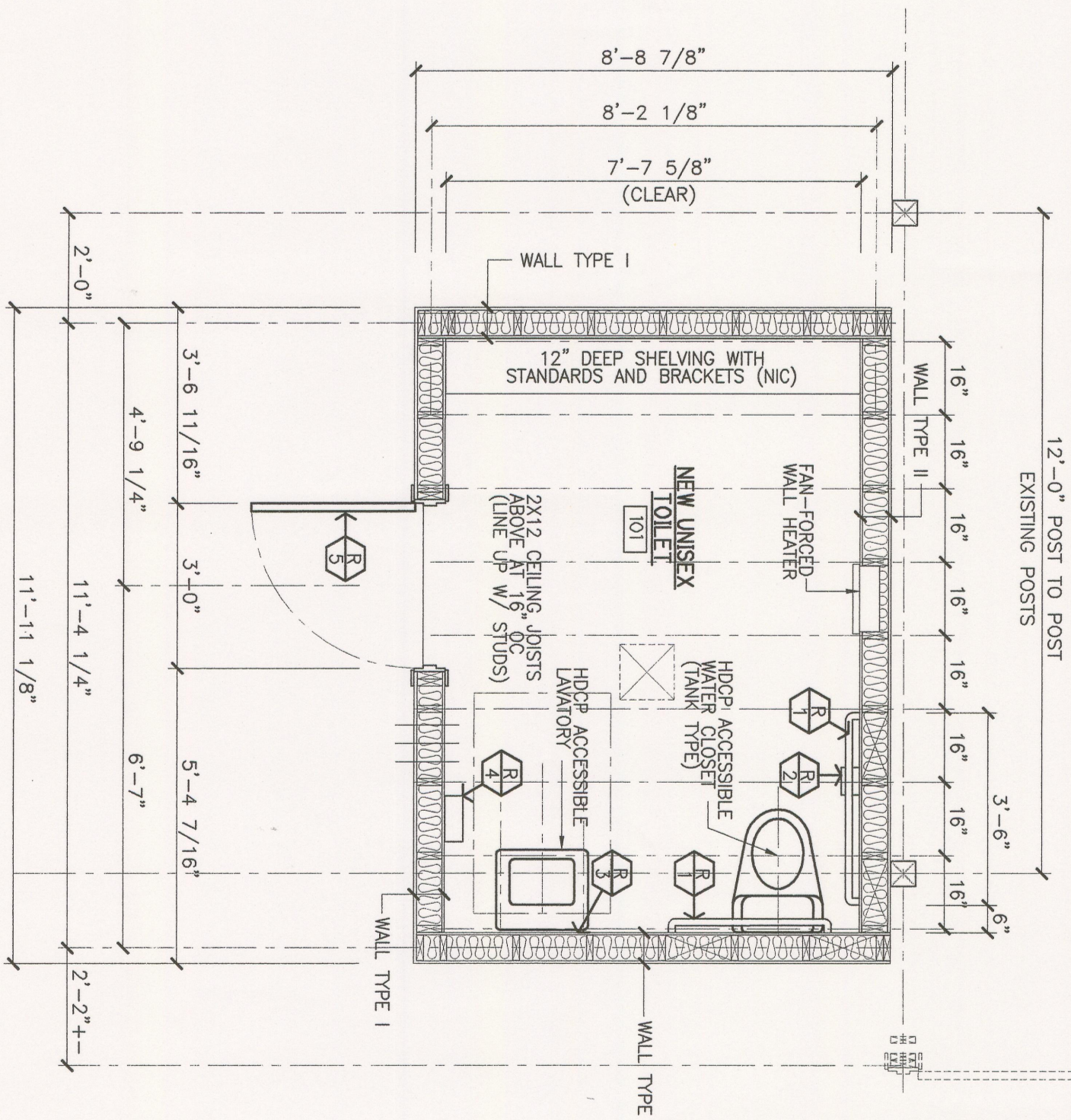
MATERIAL SPECIFICATIONS

- A. SANITARY WASTE PIPING
1. THE PIPE AND FITTINGS SHALL BE SV (SERVICE) HUB AND SPIGOT CAST IRON SOIL PIPE AND FITTINGS CONFORMING TO ASTM A74 AND ANSI A112.5.1 TAPPED INSIDE AND OUT AT THE FOUNDRY.
 2. JOINTS SHALL BE MADE UP USING LEAD AND OAKUM, CALLING LEAD SHALL CONFORM TO U.S. DEPARTMENT OF COMMERCE CS-94 AND FED SPEC CO-1-156.
 3. AS AN OPTION TO LEAD AND OAKUM, RESILIENT GASKETED COMPRESSION JOINTS CONFORMING TO ASTM F408 SHALL BE USED. JOINTS SHALL BE MADE UP TO PROVIDE PIPING SYSTEM RIGIDITY EQUAL TO THAT OF LEADED JOINTS.
 4. PIPING ABOVE GRADE SHALL BE OF THE ABOVE MENTIONED HUB AND SPIGOT TYPE OR OF THE NO-HUB TYPE CONFORMING TO THE CAST IRON SOIL PIPE INSTITUTE STANDARDS 301.
 5. THE NO-HUB COUPLING SHALL BE AMHEM FOUNDRY CO. HUSKY SP-4000, CLAMP-ALL 125 OR BY MG COUPLING CO.
 6. COPPER PIPING MAY BE USED FOR SANITARY WASTE AND VENT IN SIZES 2-IN AND SMALLER. PIPE SHALL BE TYPE L USED WITH EITHER 60/40 OR 70/30 BRASS SOLDER. SOLDER ALLOY 95/1A (95 PERCENT TIN, 5 PERCENT ANTIMONY), ASTM B32. NO SOLDER CONTAINING LEAD SHALL BE UTILIZED ON THE PROJECT.
- B. WATER PIPING
1. PIPING SHALL BE TYPE L, " COPPER WITH WROUGHT COPPER, SOLDER TYPE FITTINGS. JOINTS SHALL BE MADE WITH LEAD FREE SOLDER.
- C. WATER VALVES
1. VALVES 2-IN AND SMALLER SHALL BE FULL PORT BRONZE BALL TYPE, BY HAMMOND, WAITS, APOLLO, INBO, OR EQUAL.
- D. INSULATION
1. ALL WATER PIPING SHALL BE INSULATED THROUGHOUT WITH 1-IN THICK FIBERGLASS HEAVY DENSITY PIPE INSULATION COMPLETE WITH ALL SERVICE JACKETS.
 2. FITTINGS AND VALVES SHALL BE COVERED WITH PERMANENTLY NON-COMBUSTIBLE, ONE-PIECE, FACTORY PREMOULDED, PVC INSULATED FITTING COVERS.
 3. PROVIDE RIGID INSULATION INSERTS WITH GALVANIZED PROTECTOR SHIELDS EQUAL TO PRESHELD'S INC., MODEL WFB SERIES CS AT EACH HANGER LOCATION.
 4. SUPPLIES, DRAIN AND TRAP ON HANDICAPPED LAVATOIRES SHALL BE INSULATED WITH FULLY MOULDED WHITE, CLOSED CELL WATTLE INSULATION KIT, FREEMAN MODEL 120W-105 OR EQUAL.
- E. WATER CLOSET WC) (HANDICAPPED) (TANK TYPE)
1. 18-IN HIGH VITREOUS CHINA, FLOOR OUTLET, ELONGATED SIPHON JET BOWL, KOHLER K-3527EB HIGHLINE WATER-GUARD OR EQUAL.
 2. WHITE SOLID PLASTIC SEAT WITH EXTENDED BACK, OPEN FRONT, LESS COVER WITH CHECK HINGE AS MANUFACTURED BY CHURCH, BERNIS, OR EQUAL.
 3. CAST BRASS CLOSET FLANGE WITH BRASS CLOSET BOLTS, WASHERS, CAP NUTS AND WAX SETTING RING.
- F. LAVATORY (LAV)
1. 20-IN BY 18-IN WALL MOUNTED VITREOUS CHINA WITH 5-IN BACK, RECTANGULAR BASIN, ANTI-SPLASH RIM, FRONT OVERFLOW, TWO SOAP DEPRESSIONS, KOHLER K-2032 GREENWICH OR EQUAL.
 2. SELF-CLOSING 0.5 GPM FAUCET, SYMONS-SCOT S-60-H OR EQUAL.
 3. OFFSET DRAIN WITH GRID STRAINER, KOHLER K-13885 OR EQUAL.
 4. IPS LOOSE KEY STOPS WITH CAST BRASS ESCUTCHEONS, KOHLER K-13711 OR EQUAL.
 5. CAST BRASS ADJUSTABLE P-TRAP WITH CHROME PLATED BRASS WASTE PIPE, KOHLER K-9022 OR EQUAL WITH K-9016 CHROME PLATED BRASS WASTE PIPE.
 6. CONCEALED RAN CHAIN CARRIER FOR HANDICAPPED USE WITH FOOT SUPPORT OF 1/2" CLEARANCE FROM FLOOR, 18" HIGH, 18" WIDE, 18" J/R, SMITH CO., ZIRN INDUSTRIES, INC., JDSAM MANUFACTURING CO. OR EQUAL.
- G. ELECTRIC WATER HEATER
1. POINT-OF-USE ELECTRIC WATER HEATER ONE-GALLON CAPACITY STAINLESS STEEL TANK RATED FOR 150PSI WORKING PRESSURE.
 2. 1000 WATT, 120 VAC, SINGLE PHASE, IMMERSION COPPER SHEATHED HEATING ELEMENT.
 3. PROVIDE COMPLETE WITH 110-170 DEGREE F THERMOSTAT, INTEGRAL HI-LIMIT WITH MANUAL RESET FOR OVER TEMPERATURE PROTECTION, PRESSURE AND TEMPERATURE RELIEF VALVE, MIXING VALVE, VACUUM VALVE AND WALL BRACKETS BY THE HEATER MANUFACTURER.
 4. UNIT SHALL BE A MODEL CE-110 AS MANUFACTURED BY HUBBELL - THE ELECTRIC HEATER CO. OR EQUAL.



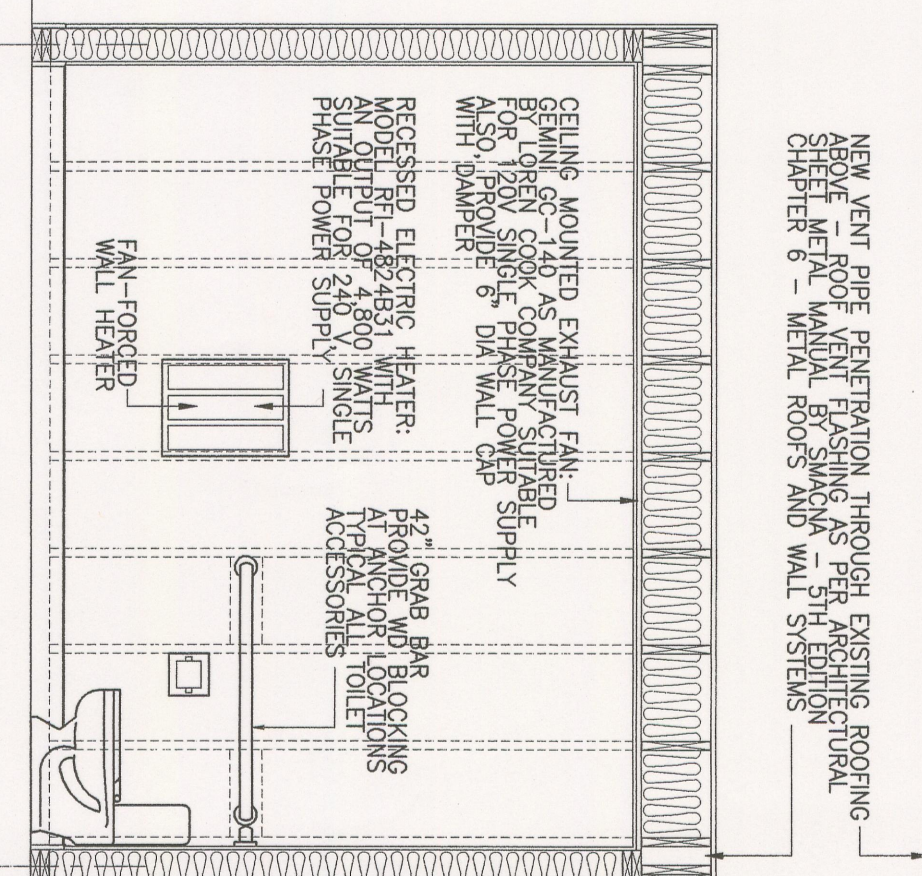
WATER DIAGRAM

NOT TO SCALE



FLOOR PLAN

SCALE: 3/8" = 1'-0"



CROSS SECTION

SCALE: 3/8" = 1'-0"

- FIELD PAINTING**
- BASED ON SHERWIN-WILLIAMS PRODUCT NUMBERS
1. HW DOOR
1 COAT KEM KROMCK UNIVERSAL METAL PRIMER (3-4 DFT)
1 COAT INDUSTRIAL ENAMEL HS (2-4 DFT)
 2. CONCRETE FLOOR (45 DAY CURE TIME)
VAPOR BARRIER BENEATH SLAB
NO SEALER ON CONCRETE
PRIMER
FINISH: ACRYLIC FLOOR-1 FT. H2O/GALLON
FIRST COAT REDUCED 1 PT. H2O/GALLON
SHANKS APPLINE AS PER MANUFACTURER'S DIRECTIONS
 3. GYPSUM BOARD
1 COAT PLYING 200 PRIMER (1.1 DFT)
1 COAT INTERIOR LATEX SEM GLOSS (1.4 DFT)
1 COAT PRIMER 200 INTERIOR LATEX SEM GLOSS (1.4 DFT)
 4. WOOD (PLYWOOD, BIRCH, DOOR PRIMER)
NO SEALER ON CONCRETE
PRIMER
FINISH: ACRYLIC FLOOR-1 FT. H2O/GALLON
FIRST COAT REDUCED 1 PT. H2O/GALLON
SHANKS APPLINE AS PER MANUFACTURER'S DIRECTIONS

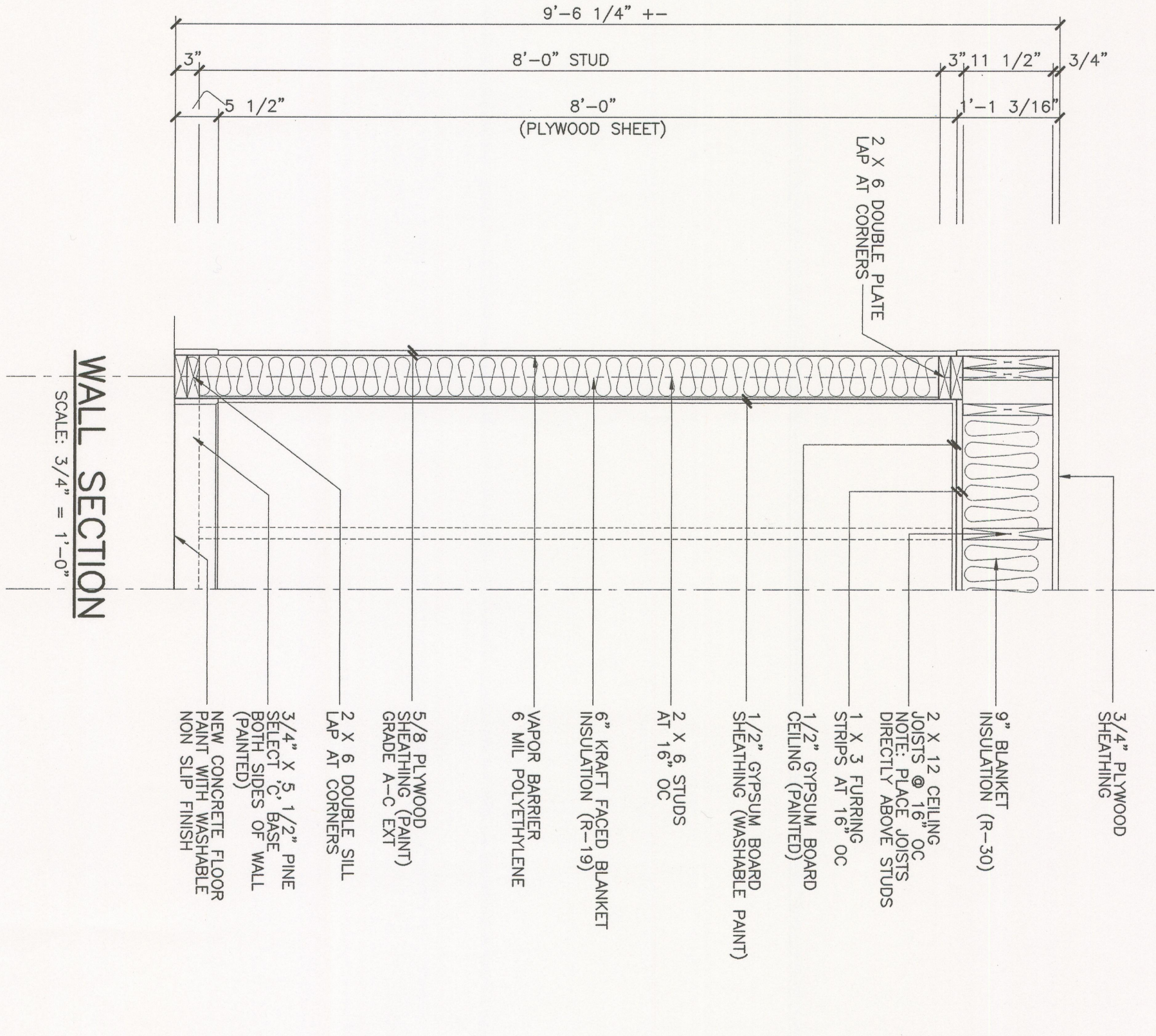
- TOILET ROOM ACCESSORIES**
- PRODUCT NUMBERS BASED ON BOBRICK WASHROOM ACCESSORIES
- B-6806 GRAB BAR - 42" LONG
EXPOSED MOUNTING
1 1/2 DIA.
 - B-2730 TOILET TISSUE DISPENSER FOR SINGLE ROLL
18"W X 36"H MIRROR
 - B-292-1836 MIRROR WITH SHELF
18"W X 36"H
 - B-282 SERIES PAPER TOWEL DISPENSER
400 C FOLD OR 500 MULTIFOLD
 - B-682 HAT AND COAT HOOK
BRIGHT POLISHED
1" W X 6 1/4" H

DOOR AND FRAME

1. DOOR SHALL BE THERMA TRU INSULATED STEEL, (PAINTED) SOLID DOOR, GASTIGHTING 3'-0" X 6'-8" X 1 3/4" TO TIEK LIMITED WARRANTY
2. DOOR HINGES SHALL BE DRAWN PRELIMING (SIZE TO FIT WALL) WEATHERSTRIPPING
3. DOOR HARDWARE: HINGES: STAINLESS STEEL #98181 BY STANLEY HINGES, 2" X 4" X 1/2" (2) LATCHES: 1" X 4" X 1/2" (2) WEATHER SEALS: (HEAD LATCHES & SILL) LEAD OR EQUAL THRESHOLD: ZERO FEMMO, REESE OR EQUAL MAXIMUM HEIGHT 1 1/2" (ADA APPROVED)

WALL TYPES

1. WALL TYPE I
5/8" EXTERIOR GRADE PLYWOOD (PAINTED)
VAPOR BARRIER BENEATH PLYWOOD
2 X 4 STUDS AT 16" OC
1 1/2" GYPSUM BOARD (PAINTED)
RUBBER BASE (4") TOILET ROOM SILENCER BENEATH 2X8 SILL
2. WALL TYPE II
SAWF AS WALL TYPE I
CONSTRUCT WALL ON FLOOR WEATHERSTRIPPING



WALL SECTION

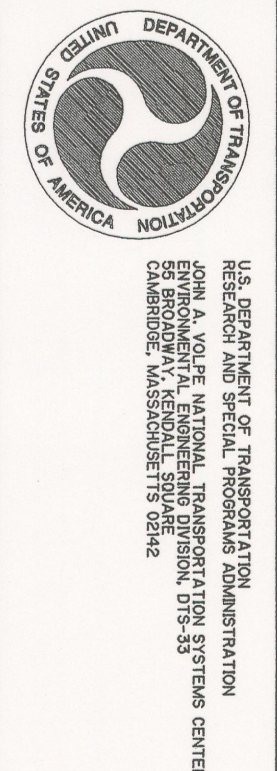
SCALE: 3/4" = 1'-0"

ACCEPTED BY: _____

DATE: _____

PRELIMINARY - FOR REVIEW ONLY

DESIGNED BY: SCHLEYER, JUDITHA	
DRAWN BY: SCHLEYER, JUDITHA	
SHEET CHK'D BY: BERNIERIS	
CROSS CHK'D BY:	
APPROVED BY: _____	
DATE: APRIL 2002	
REV. NO.	DATE
0	4/09/02
NOT FOR CONSTRUCTION	
REMARKS	



CONTRACTOR REPORT PROVIDED BY:
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EPA ASBESTOS REMOVAL PROJECT
LIBBY, MONTANA

NEW TOILET ROOM PLAN
ARCHITECTURAL PLAN & DETAILS
PLUMBING PLAN & DETAILS

PROJECT NO. 32373
FILE NAME: ATBTP001.DWG
SHEET NO. A/P-1